Clear Form

Michigan Department of Transportation
5100B (02/06)

CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

Exhibit B

PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
LeighAnn Mikesell	60571C	62015

DESCRIPTION IF NO JN/CS

MDOT PROJECT MANAGER: Check all items to be included in RFP.

WHITE = REQUIRED
GRAY SHADING = OPTIONAL

Check the appropriate Tier in the box below

CONSULTANT: Provide only checked items below in proposal.

☐ **TIER I ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☑ **TIER III (>$250,000)**	
☐	☐	☑	Understanding of Service
☐	☐	☐	*Innovations*
☐	☐	☐	*Safety Program*
N/A	☐	☑	Organization Chart
☐	☐	☑	Qualifications of Team
☐	☐	☑	Past Performance
Not required as part of official RFP	Not required as part of official RFP	☐	Quality Assurance/Quality Control
☐	☐	☐	Location of Service Personnel **(Only check for on-site inspection services)**
N/A	N/A	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages including cover sheet **(No Resumes)**	7 pages	19 pages	Total maximum pages for RFP **not including key personnel resumes**

BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide 5 paper copies of the Proposal to the MDOT project manager named in the attached scope of services.

These copies must be received by **10:00 am, May 19, 2006.** Fax and electronic copies are not acceptable.

In addition, provide one **stapled** copy to:

Regular Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as

possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

The selection team will review the information submitted and will select the firm considered most qualified to perform the engineering services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

The maximum allowable pages for the proposal are limited to the selected Tier shown on MDOT Form 5100B, which is posted with this RFP. Page limits apply to the entire proposal. The number of pages per section is the decision of the creator of the proposal. Include in proposal only those items that are checked by the MDOT project manager on form 5100B.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

Michigan Department of Transportation

SCOPE OF SERVICES
For
DESIGN SERVICES
CS 62015 – JN 60571C

PROJECT LOCATION: M-20 (Baseline Road) from a point 126 feet east of Catalpa Ave. easterly 7.415 miles to a point 355 feet west of Cottonwood Ave., in Wilcox, Everett, Big Prairie and Goodwell Townships, Newaygo County.

DESCRIPTION OF WORK: Proposed cold milling, HMA resurfacing, trench and widen shoulders, drainage work, vertical curve correction at Poplar Avenue, and safety item upgrades.

I Primary Prequalification Classification:
Roads and Streets

II Secondary Prequalification Classification:

Maintaining Traffic Plans and Provisions
Pavement Marking Plans
Non-Freeway Signing Plans
Short and Medium Span Bridges
Road Design Surveys

The anticipated start date of the service is: **July 3, 2006.**

The anticipated completion date for the service is:
Plan Completion = July 6, 2007.
Consultant Plan Completion = January 21, 2008
Final Deliverables= April 4, 2008.

DBE Requirement: **10%**.

MDOT PROJECT MANAGER:
LeighAnn Mikesell
Muskegon TSC
2225 Olthoff Drive
Muskegon, MI 49444
(231) 777-7364
(231) 777-3621 fax

I. CONSULTANT RESPONSIBILITIES

Pre-existing Documents pertaining to this design scope of services (design plans, etc.) may be viewed at the **Muskegon TSC.** Please call **(231) 777-7364** to schedule an appointment to view the documents.

Complete the design of this project including, but not limited to the following:

A. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.

B. Compute and verify all plan quantities.

C. Prepare detour plans and special provisions for maintaining traffic during construction.

D. Prepare temporary and permanent pavement marking plans and special provisions.

E. Prepare right-of-way plans as required to locate, verify and purchase real estate and/or obtain construction access permits for this project. ROW acquisition is expected for the vertical curve modification near Poplar Street, stream relocation of Flinton Creek near Oak Street, and miscellaneous locations with large fills, shoulder widening or slope flattening. Additional drainage easements may need to be acquired at culvert locations.

F. Provide solutions to any unique problems that may arise during the design of this project.

G. It is anticipated that the Consultant will be required to provide design services during the construction phase of this project. Shop drawing review of any box culverts or linings would be included in those services. A separate authorization for construction assistance services will be issued.

H. Evaluate existing roadway geometrics compared to MDOT guidelines. Prepare design exceptions if needed.

I. Review roadway pavement and soils information that will be provided to the Consultant, from MDOT. The Consultant shall incorporate the pavement and soil

boring data into the soil boring log sheet. MDOT will provide the Consultant the pavement design for this project from this information.

J. Acquire pick up field survey items as needed throughout the design of the project. MDOT will supply the completed design survey to the Consultant for their use on this project. However, pick up of any additional survey items will be the responsibility of the Consultant. All surveys must be completed in accordance with the MDOT Standards & Specifications dated March 2006 and the MDOT Design Survey Manual. The consultant must supply MDOT with all data and materials associated with this survey pickup at the time it is completed. All survey data must be processed in the most current version of CAiCE software. All design project files must be submitted to MDOT in Microstation version 8 format. It is strongly recommended that the Consultant use the latest MDOT tugboat to build the design files.

K. The Consultant will be required to determine and compute the existing and proposed MDOT ROW throughout the project limits to aid in the design process and the purchase of real estate for this project. The Consultant will be responsible for miscellaneous staking of utilities, existing ROW and proposed ROW that may be needed to resolve potential conflicts, aid in the purchase of real estate, define the MDOT ownership, secure grading permits or otherwise bring to light a potential conflict. MDOT will provide monument caps (plastic caps to fit a #5 rebar) and/or semi-permanent ROW markers (carconite MDOT ROW posts) to the Consultant for use on this project. Any miscellaneous survey pickup, staking, or ROW computations that may be needed must be discussed with the appropriate area of responsibility within the Grand Region of MDOT and approved by the MDOT Project Manager prior to starting the work.

L. Design box culverts as required to replace existing cross culverts. Design of box culverts to include details for steel reinforcement of end sections, connection of the end sections to the precast box sections, details of the number and placement of the precast box sections, and aggregate base components for the culverts determined from soil boring reports. MDOT hydraulics will analyze conditions and recommend sizes of the proposed culverts.

~~II. PROJECT LOCATION~~

~~The project is located on M-20 (Baseline Road) from a point 126 feet east of Catalpa Ave. easterly 7.415 miles to a point 355 feet west of Cottonwood Ave., in Wilcox, Everett, Big Prairie and Goodwell Townships, Newaygo County. The project length is 7.415 miles.~~

III. PROJECT DESCRIPTION

This project consists of all work related to designing this rehabilitation (3R) project, including but not limited to the following:

A. The proposed section includes 2" of HMA milling with 2 courses (4") of HMA resurfacing of mainline from the POB to the POE of the project.

B. The shoulders will be trenched and widened to a minimum 6' width (3' paved with 3' gravel) along the entire corridor. In guardrail sections, shoulders will be widened to 8'. Shoulder surfacing will match the 2 course (4") HMA surfacing of the mainline.

C. Mainline shall be 2 - 11' lanes.

D. The proposed mainline cross-slope shall be 2.0%. Shoulder slopes are proposed at 4%.

E. All intersection approaches will be replaced in kind with Detail III, Type I or Detail II approaches. Maintenance gravel will be used for the maintenance of traffic at intersections and driveways.

F. All vertical curves need to be evaluated against current standards. It is anticipated that the vertical curve near Poplar Street will require modification to meet sight distance standards. Numerous other vertical curves are expected to require design exceptions.

G. All cross-culverts are scheduled to be replaced though culverts in high fill areas may be candidates for lining. MDOT will complete the hydraulic analyses and provide the Consultant with the recommended cross-culvert sizes or lining options. The Consultant shall provide MDOT with any necessary data in order to assist in the analysis of the culverts and prepare supporting documents for permit applications, as well as design any proposed box culverts or culvert extensions as recommended by MDOT hydraulics. The Consultant shall inspect all culverts for proper endings, possible extension, and any necessary grading to ensure slopes are traversable.

H. All driveway culverts shall be examined for replacement and proper endings installed. The Consultant shall provide MDOT recommendations as to which driveway culverts need replacement.

I. Ditches shall be inspected for drainage and cleaning, and proposed work items included in the plans.

J. Underdrains may need to be installed if required by soil conditions. This will be determined by MDOT after the analysis of the soil borings is completed.

K. Existing guardrail shall be salvaged for re-installation. Guardrail calculations shall be done by the Consultant at all locations requiring guardrail (existing and new) to ensure that the guardrail lengths meet current design standards. Details concerning the construction layout of the proposed guardrail runs shall be shown in the plans. The Consultant should explore the possibility of flattening slopes to eliminate guardrail and make recommendations.

L. All hazards within the clear zone shall be removed or protected. MDOT will provide locations and quantities for any necessary tree removals and/or clearing required within the clear zone for this project.

M. Provide earthwork and slope restoration quantities to complete the designed project. Peat excavation is expected at various locations throughout the project.

N. Permanent sheet piling is projected to be used as part of the shoulder widening work along M-20 near Oak Street, where Flinton Creek parallels M-20. Sheet piling was also estimated for one of the swamp locations where peat excavation work is proposed.

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

O. Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

P. Maintain a design project record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

The Consultant shall utilize the MDOT provided design survey for this project's design. The Consultant will be provided this survey information in electronic and hard copy format. Any questions regarding the content of this survey information should be

IV. PROJECT CONSTRUCTION COST

A. The estimated cost of construction is:

1.	Safety Related Work	$ 97,000.00
2.	Base, Surface and Shoulder	$3,778,000.00
3.	Non-Motorized	$ 0.00
4.	Geometric Improvements	$ 585,000.00
5.	Bridge Repair	$ 0.00
7.	Drainage Adjustment and Improvement	$ 812,000.00
8.	Detours and Maintaining Traffic	$ 155,000.00
10.	Permanent Pavement Markings	$ 25,000.00
11.	Environmental Items	$1,125,000.00
11.	Miscellaneous	$1,880,000.00
	CONSTRUCTION TOTAL	**$8,457,000.00**

B. The estimated cost of real estate is: $99,000.00

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter justifying the changes in the construction cost estimate.

V. PROJECT SCHEDULE

The scheduled Consultants plan completion date for this project is January 21, 2008. The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant=s Monthly Progress Reports.

Target Date	Task #	Description
06-19-06		*Anticipated Consultant Authorization Date*
		MDOT submittal of Design Survey information to Consultant
		MDOT submittal of Soil Boring and Pavement Coring Information to Consultant
		MDOT submittal of Hydraulic Analysis results to Consultant.
	3360	Prepare Base Plans
	3361	Prepare Preliminary Right-Of-Way Plans
10-18-06		*Consultant Submittal of Base Plans and Preliminary Right-Of-Way Plans to MDOT for Review*
11-17-06	3380	*Base Plan Review Meeting (Consultant Run, approximate date)*
	3390	Develop Maintaining Traffic Concepts
	3540	Develop Construction Zone Traffic Control Plan
	3552	Develop Preliminary Permanent Pavement Marking Plan
	3580	Develop Preliminary Plans
	3581	Develop Final Right-Of-Way Plans
02-12-07	3590	*Consultant Submittal of Preliminary(GI) Plans, Final Right-Of-Way Plans, and Environmental Permit data to MDOT for review.*
03-13-07	352M	*The Plan Review Meeting (GI), approximate date*
03-28-07		**MDOT submittal of Environmental Permit**
	3822	Complete Permanent Pavement Marking Plans
	3830	Complete the Construction Zone Traffic Control Plans
	3840	Develop Final Plans and Specifications
07-06-07	380M	Plan Completion (Plans 100% Complete)
07-06-07		*Consultant submittal of Final Plan/Proposal (OEC)Package to MDOT for final review*
08-08-07	387M	*Omissions/Errors Check (OEC) Meeting (approximate date)*
08-24-07	3870	*Consultant submittal of Final Plan/Proposal(OEC)Package to MDOT for final review*
01-21-08		Consultant's Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT
04-04-08		Final Deliverables to MDOT

VI. PAYMENT SCHEDULE

Compensation for this Scope of Design Services shall be on an actual cost plus fixed fee basis.

VII. MONTHLY PROGRESS REPORT

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to LeighAnn Mikesell, Project Manager and Consultant Coordinator. The monthly progress report shall follow the guidelines in Attachment B.

VIII. FORMAT

Full size plans (cut size 24" x 36") and half size (cut size 11" x 17") consisting of plan sheets and profile sheets will be required. Each plan submittal and final deliverables shall also include the plan sheets compiled in one electronic file, in Adobe .pdf format (for both 24”x36” and 11”x17” sheets), and copied onto a CD and included as part of each plan submittal package. The project will require a scale of 1” = 50’ (English units). Plan sheet type should include removal and construction on one sheet with separate profile sheets.

Other plan sheets that are required for this project shall be completed by the Consultant. These include, but are not limited to the following plan sheets:

A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.

B. Typical cross-sections.

C. Project specific details.

D. Note sheet.

E. Alignment, witness and benchmark sheet.

F. Removal, construction, and profile sheets

G. Construction detour and traffic control plans.

H. Detail grade sheets for intersections, culverts, and critical areas.

I. Paving and pavement marking details.

K. Culvert and culvert end treatment sheet(s).

L. Soil boring log sheet(s).

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.

All plans, specifications, and other project related items are subject to review and approval by MDOT.

IX. UTILITIES

The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.

X. TRAFFIC CONTROL AND MDOT PERMITS

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Pam Sebenick, Utilities/Permits Section, Real Estate Division at (517) 373-7680

XI. PRE-QUALIFICATION AND SUBCONTRACTING OF CONTRACT WORK

Any task(s) for which the Consultant is not prequalified must be completed by a Subcontractor that is pre-qualified for that task(s). Any questions regarding prequalification should be directed to Phil Brooks, Prequalification Manager, at (517)335-2514.

The Departments prequalification is not a guarantee or warranty of the subcontractors ability to perform or complete the work subcontracted. The Consultant remains fully responsible to the Department for completion of the work according to the authorization as if no portion of it had been subcontracted.

All subcontractor communications with the Department shall be through the Consultant to the MDOT Project Manager. This requirement may be waived if a written communication plan is approved by the MDOT Project Manager.

The Department may direct the immediate removal of any subcontractor working in violation of this subsection. Any costs or damages incurred are assumed by the Consultant by acceptance of the authorization. It is further understood that the Consultants responsibilities in the performance of the contract, in case of an approved subcontract, are the same as if the Consultant had handled the work with the Consultants own organization.

XII. P/PMS TASK

D. **P/PMS TASK 3360 - PREPARE BASE PLANS**
See Consultant Manual Attachment C for details.

E. **P/PMS TASK 3361 - SUBMITTAL OF PRELIMINARY RIGHT-OF-WAY PLANS**
See Consultant Manual Attachment C for details.

F. **P/PMS TASK 3380 - REVIEW BASE PLANS**
See Consultant Manual Attachment C for details.

G. **P/PMS TASK 3390 – DEVELOP MAINTAINING TRAFFIC CONCEPTS**
See Consultant Manual Attachment C for details.

H. MDOT will conduct Hydraulic Analysis work for cross-culverts under M-20. MDOT will perform storm sewer design calculations, including appropriate outlets and energy dissipation if necessary, as outlined in the MDOT Drainage Manual. Detention may be required. Detention pond design must meet, but is not limited to, local agency storm water regulations and Michigan Department of Environmental Quality water quality permit requirements. The Consultant shall submit all drainage maps, proposed profiles

and culvert cross sections required to supplement any permit submittal or support the MDOT Hydraulic unit, to the MDOT Project Manager for review prior to the Plan Review.

I. The consultant shall identify the locations of any water main and/or sanitary sewer on the project.

J. If watermains and/or sanitary sewers are present within the project limits, the CONSULTANT shall evaluate the necessity for the relocation of water mains and sanitary sewers, in accordance with Design Divisions Informational Memorandum #441B and #402R dated April 13, 1992. The CONSULTANT shall submit a report to Steven J. Urda, Design Engineer - Municipal Utilities, Design Division for review and concurrence. A copy of the report shall be sent to the Project Manager. **If relocation is necessary and watermain and/or sanitary sewer work is not part of the Scope Of Work, contact the MDOT Project Manager immediately.**

K. **P/PMS TASK 3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
See Consultant Manual Attachment C for details.

L. **P/PMS TASK 3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN**
See Consultant Manual Attachment C for details.

M. **P/PMS TASK 3580 - DEVELOP PRELIMINARY PLANS**
See Consultant Manual Attachment C for details.

N. **P/PMS TASK 3581 - FINAL RIGHT-OF-WAY PLANS**
See Consultant Manual Attachment C for details.

O. **P/PMS TASK 3590 - REVIEW PRELIMINARY PLANS (THE PLAN REVIEW)**
See Consultant Manual Attachment C for details. Included with The Plan Review submittal, shall be all necessary drawings required to be included with all necessary Environmental Permits.

P. **P/PMS TASK 3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN**
See Consultant Manual Attachment C for details.

Q. **P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
See Consultant Manual Attachment C for details.

R. **P/PMS TASK 3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS**

See Consultant Manual Attachment C for details.

S. **P/PMS TASK 3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING**
See Consultant Manual Attachment C for details.
The interval for plotting cross-sections and developing the grade book shall be 50 feet. The intervals for critical areas shall be 25 feet.

T. **P/PMS TASK 5010 - CONSTRUCTION PHASE ENGINEERING AND ASSISTANCE**
The Consultant may be required to provide design services during the construction phase of this project. If construction assistance is required, then a separate authorization for those services will be issued.

U. The Consultant shall be required to prepare and submit a CPM network for the construction of this project. See Attachment A for details

V. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. The Consultant will provide and distribute official meeting minutes for the base plan review meeting. MDOT will provide and distribute official meeting minutes for the The plan review meeting.

W. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc. For both the base plan review and the OEC meetings, the Consultant shall submit to MDOT twenty (20) sets of plans (11x17 sheets) and proposal packages for distribution.

X. Prepare and submit any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.

Y. Attend any project-related meetings as directed by the MDOT Project Manager.

Z. The Consultant shall assist in the review of driveway and utility permit requests, incorporate the information in the design plans and respond within 2 weeks from receipt of the permit.

AA. Perform any pick up survey needed to complete the design of the project.

BB. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.

CC. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

DD. The Consultant's authorization will be held open until final deliverables are submitted. The Consultant shall perform any project letting package modifications necessary to update the project specifications and details between the time of plan completion and advertisement of this project. Any modifications needed to the plan completion package will have to be completed prior to January, 2006. The Consultant shall manage all authorized hours to complete such modifications throughout the design process.

XIII. MDOT RESPONSIBILITIES (GENERAL)

A. Schedule and/or conduct the following:
   1. Project related meetings
   2. The Plan Review
   3. Utility Meetings
   4. Quantity summary sheets and final item cost estimates
   5. Packaging of plans and proposal

B. Furnish special details and pertinent reference materials.

C. Furnish prints of an example of a similar project and old plans of the area, if available.

D. Supply information on existing pavement structure as necessary.

E. Coordinate any necessary utility relocations.

F. Furnish pavement core and soil boring information. MDOT will provide electronic files of the log of borings to the Consultant to include in the plans. The Consultant may need to make minor revisions to the sheets. (Consultant shall place information on plan sheets).

G. MDOT shall provide the Consultant the pavement design for this project.

H. Furnish design survey to Consultant.

I. Conduct hydraulic analysis of cross-culverts to be replaced and provide recommended culvert sizes.

J. Obtain and review existing title work.

K. Furnish diskette of file and instructions for the MDOT Stand Alone Estimator=s Worksheet (SAEW).

VENDOR PAYMENT:

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's bulletin board system. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Vendor for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Vendor. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the PE activities of this project. Hours spent in administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

No reimbursement for overtime hours will be allowed without prior Project Manager approval.

ATTACHMENT A

CS 62015 – JN 60571C

M-20 (Baseline Road) from a point 126 feet east of Catalpa Ave. easterly 7.415 miles to a point 355 feet west of Cottonwood Ave., in Wilcox, Everett, Big Prairie and Goodwell Townships, Newaygo County.

CONSTRUCTION CRITICAL PATH NETWORKS

I. INTRODUCTION

The Consultant is required to submit a Construction Critical Path Network at various points in the design process. Refer to the following:

P/PMS TASK 3580 - DEVELOP PRELIMINARY PLANS

P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN

P/PMS TASK 3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS

Construction Critical Path Networks are often needed to develop the progress schedule for a project. They are required on any project designated to include an Incentive/Disincentive or Special Liquidated Damages clause. Construction Critical Path Networks are also recommended for projects with the following characteristics:

1. New construction.
2. Major reconstruction or rehabilitation on an existing roadway that will severely disrupt traffic.
3. Unique or experimental work.
4. More than one construction season.
5. Complex staging (multiple stages with traffic shifts).

As noted in MDOT=s Construction and Technology Instructional Memorandum 1997-7, Progress Schedule Determinations/Critical Path Rates,

> A*preparation of a Critical Path is a requirement on <u>all</u> consultant-designed projects, regardless of the project type or complexity.*@

The MDOT Resident Engineer assigned to the project should be consulted when developing Construction Critical Path Networks.

MDOT requires the precedence diagramming method. The Consultant will submit this network in MPX version 4.0.

II. NETWORK DEVELOPMENT

The network will be defined using the following steps.

1. Activity definition.
2. Activity sequencing.
3. Duration estimation.
4. Schedule development.

1. ACTIVITY DEFINITION

The Consultant will define the specific activities in enough detail so that the proper objectives will be met. The Consultant must identify assumptions (those factors considered true, real or certain). Supporting detail for the activities should be documented and organized as needed to simplify the review of the activities by MDOT personnel.

The Construction Critical Path Network must start with the ALetting Date@ as the first activity and terminate with the AEnd of Project@ as the finish activity.

A sufficient number of activities will be required with sufficient detail so that the controlling construction operation(s) may be identified. Notation on each activity shall include a brief work description and activity time duration.

2. ACTIVITY SEQUENCING

Activity sequencing involves identifying and documenting interactivity dependencies. The Consultant must sequence activities accurately to support later development of a realistic and achievable construction schedule. Two types of dependencies should be considered. Mandatory dependencies are inherent in the nature of the work being done, such as construction sequencing. Discretionary dependencies are based on a knowledge of the work to be done. Constraints are used to show how the activities relate to each. The Consultant must include documentation supporting all discretionary dependencies used in the project. All activities must lead to another activity. Only Start to Start, Finish to Finish and Finish to Start relationships will be allowed. All logic shall show how the given activity is dependent on its preceding activities.

3. DURATION ESTIMATION

After the Consultant has sequenced the activities, the Consultant should determine the activity duration. Activity duration estimating involves assessing the number of work periods likely to be needed to accomplish each activity. Duration (working days): No activity will have a duration greater than 20 working days unless approved by the Engineer. Activities that will be allowed to exceed 20 working days include, but are not limited to, working drawing approvals or other activities not under the control of the Contractor. If requested by the Engineer, the Consultant shall explain the reasonableness of activity time durations. The approved MDOT production rates will be used in estimating activity duration. These are available in the Supplemental Information section of this attachment. The Consultant must document and submit all assumptions made during the duration estimation to MDOT.

4. SCHEDULE DEVELOPMENT

The activity sequencing, duration estimations and the calendars are combined to create the construction schedule. During the development of the schedule the Consultant will verify:

1. The required schedule to build the project.
2. The constructability of the project.
3. If the maintaining traffic scheme will work.
4. If seasonal limitations will affect the construction.
5. Any other project specific considerations.

The MDOT Calendars will be used by the Consultant in developing the network. The calendars are based on a 4, 5 or 6 day work week. The MDOT Calendars are included in the Supplemental Information section of this attachment.

At this point there should be no negative float in the network. If there is, there is an error in the network and the error must be corrected before network submittal.

All summary tasks shall be removed prior to submittal to MDOT Project Manager

III. DELIVERABLES

After this final step the design consultant will submit the finished CPM schedule to MDOT

1. Documents

A. 11" x 17" plot of the network. The critical path shall be clearly identified on the plot. A larger plot may be required for complex networks.

B. Work Day / Completion Date Determination Worksheet.

C. List of any other assumptions or controlling factors used in creating the network. For example, permit or maintaining traffic restrictions.

2. Electronic Format

This section sets the requirements for the electronic submittal of the Consultant=s Construction Network. All networks shall be submitted on a 3.5 inch floppy disk (or via E-mail) using one of the following formats:

A. **Standard Electronic Media Format:** This is a standard ASCII text file containing the data elements below, in the order specified. This file can be created using any text editor or word processing application (i.e., MS-Word, WordPerfect, Notepad, Write) but must be saved as an ASCII file.

The **first line** will provide a descriptive header describing the submittal and containing:

Control Section
Job Number
Route
Consultant name
Date of Submittal

The next line will be **blank**, followed by multiple data lines.

Each **data line** will contain one record pertaining to one task of the job. Separate data fields by a comma. Fields within each task line are as follows:

(Note that the term "task" is synonymous with "activity." Leave fields that are not required blank)

(1) Task # (Job # followed by a hyphen followed by this task's unique 4 digit task number. This is the Preceding Event Activity Code)
(2) Description of Task, Milestone or Hammock, blank if this record is a constraint
(3) Calendar (see attached list)
(4) Duration of task, blank for constraints
(5) Task # of the next task (Succeeding Event) - leave blank if this record is not a constraint or hammock

(6) Type of constraint (FS, SS, FF) - leave blank if this record is not a constraint.
(7) Delay, if required
(8) Original "Baseline" Start Date
(9) Original "Baseline" Finish Date
(10) Current (forecast) Start Date (early start)
(11) Current (forecast) Finish Date (early finish)
(12) Estimated completion date (if different from early start + current duration)
(13) Late Start Date
(14) Late Finish Date
(15) Actual Start Date
(16) Actual Finish Date

Example - each line contains the following:

Task # (preceding event), Description, Calendar, Duration, Next Task # (succeeding event), Constraint Type, Delay, Baseline Start, Baseline Finish, Early Start, Early Finish, Estimated Completion Date, Late Start, Late Finish, Actual Start, Actual Finish, Total Float.

B. **Primavera Project Planner(P3) 2.0 Export Procedure:** Users who have Primavera Project Planner(P3) version 2.0 can automatically create a export file by following the below export procedure below. **Users having an older version of Primavera may use the applications export feature only if they are able to include all the data elements listed in the version 2.0 format.**

1. Choose Tools, Project Utilities, **EXPORT**
2. Click **ADD**, then click **OK** to accept the next sequential ID number, or type a unique number to identify the specifications and click **OK**
3. Enter a description for the specification in the Title field
4. Specify data items to export

Activities
- Select **Contents of List**
- Use the Description column to specify which data items to export
- To add items, click the right mouse button in the Description column and choose from the list. Suggested Items include: **Activity ID, Activity Description, Actual Start, Actual Finish, Calendar ID, Early Start, Early Finish, Late Start, Late Finish, Original Duration.**
- Select **All Current, All Target**, or **All Target2**
- Set Description Length to 48

OR

Constraints
- Select **Successor relationships** - Choose this option to export Activity IDs and their corresponding successors only. Lags and relationship types will also be displayed in this output file.

5. Click **FORMAT** in Export Dialog Box
6. In the Output file section, enter a new name and path (ex. A:\actexp or A:\conexp). Do not include a file extension.
7. In the type field, click the minimize button and choose the **[.PRN] - ASCII** file format for the output file.
8. Select **CALENDAR** for Date Format
9. Set ASCII Output Field Separation to **1** and Blank column width to **0**
10. Click **RUN**
11. In the Output Options dialog box, click on **OK**

NOTE: A COMPLETED FILE EXPORT WILL CONSIST OF 2 EXPORT FILES (ACTIVITIES & CONSTRAINTS)

C. **Microsoft Project Export Procedure:** Users of Microsoft Project Version 4.0 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In the Save File as Type box Select **MPX 4.0**
3. On the drive box select a: or whichever drive is the 3.5" Floppy drive
4. Click on **OK**

This saves the file in MPX format.

D. **Primavera Sure Track:** Users of Sure Track Version 2.0 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In the filename box input a filename
3. In the Save File as Type box Select **MPX**
4. On the drive box select a: or whichever drive is the 3.5" Floppy drive
5. Click on **OK**

This saves the file in MPX format

E. **Scitor Project Scheduler 7 Export Procedure:** Users of Scitor Project Scheduler Version 7 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In filename box select a filename
3. In the Save File as Type box Select MPX
4. On the drive box select a: or whichever drive is the 3.5" Floppy drive
5. Click on **OK**

This saves the file in MPX format

F. **Export Files with Other Scheduling Applications:** Most scheduling packages have export functions similar to those described above. If the Consultant chooses to use packages with export capabilities, they shall include all items listed in the Standard Media Format in a text or ASCII type file.

IV. SUPPLEMENTAL INFORMATION

A. MDOT CRITICAL PATH-CONSTRUCTION TIME ESTIMATES

Drainage

Cross Culverts	
Rural Highways	40 m/day
Expressways	50 m/day
Large Headwalls	5 days/unit
Slab or Box Culverts	5 days/pour
Plowed in Edge Drain(production type project)	4500 m/day
Open Graded Underdrain(production type project)	1200 m/day
Sewers	
0m-5m(up to 1500mm)	40 m/day
0m-5m(over 1500mm)	25 m/day
5m-over(up to 1500mm)	25 m/day
5m-over(over 1500mm)	20 m/day
Jacked-in-place	13 m/day
including excavation pit & set up	min. 5 days
Tunnels	
hand mining	8 m/day
machine mining	20 m/day
including excavation pit & set up	min. 5 days
Manholes	3 units/day
Catch Basin	4 units/day

Utilities

Water Main(up to 400mm)	100 m/day
Flushing, Testing & Chlorination	4 days
Water Main(500mm-1050mm)	25 m/day
Flushing, Testing & Chlorination	5 days
Order & Deliver 600 mm HP Water Main	50 days/order
Gas Lines	100 m/day

Earthwork and Grading	**Metro Exp**	**Rural**
Embankment(CIP)	1500 m3/day	5300 m3/day
Excavation and/or Embankment(Freeway)	1500 m3/day	9200 m3/day
Excavation and/or Embankment(Reconstruction)	750 m3/day	3800 m3/day
Embankment(Lightweight Fill)	300 m3/day	600 m3/day
Muck(Excavated Waste & Backfill)		1500 m3/day
Excavation(Widening)		600 m/day
Grading(G & DS)		750m/day

Subbase and Selected Subbase(up to 7.4m)	600 m/day
Subbase and Selected Subbase(7.4 m & over)	450 m/day
Subgrade Undercut & Backfill	1500 m3/day
Subbase & Open-Graded Drainage Course	450 m/day

Surfacing

Concrete Pavement(7.3m)	450 m/day
Including Forming & Curing	min. 7 days
Bituminous Pavement(7.3m)	1200 m/day/course
Concrete Ramps(4.9m)	300 m/day
Including Forming & Curing	min. 7 days
Curb(1 side)	750 m/day
Concrete Shoulder-Median	1200 m2/day
Bituminous Shoulders(1 side per course)	750 m/day
Sidewalk	180 m2/day
Sidewalk(Patching)	65 m2/day

Structures

Sheeting(Shallow)	30 m/day
General Excavation at Bridge Site	750 m3/day
Excavation for Substructure(Footings)	1 unit/day
Piles(12m)	15 piles/day
Substructure(Piers & Abutments)	5 days/unit
Order and Delivery of Beams	
Plate Girders	100-120 days/order
Rolled Beams	90-120 days/order
Concrete Beams	50 days/order
Erection of Structural Steel	3 days/span
Bridge Decks	
Form & Place Reinforcement(60m Structure)	15 days
Pour Deck Slab(1 1/5 days/pour)	2 days/span
Cure	14 days
2 Course Bridge Decks	
Add 9 days for Second Course Latex	
Add 12 days for Second Course Low Slump	
Sidewalks and Railings	
Sidewalks and Parapets	5 days/span
Slip Formed Barriers	2 days/span
Clean Up	10 days
Pedestrian Fencing	
Shop Plan Approval & Fabrication	1-2 months

Erection	1 week/bridge
Rip Rap Placement	
Bucket Dumped	385 m^3/day
Bucket Dumped and Hand Finished	131-523 m^3/day
Retaining Walls	1 Panel/day min. 10 days
Railroad Structures	
Grade Temporary Runaround	750 m3/day
Ballast, Ties & Track	50 m/day
Place Deck Plates	5 days/span
Waterproof, Shotcrete & Mastic	5 days/span
Railroad Crossing Reconstruction	10-15 work days (depends on if concrete base is involved)
Temporary Railroad Structures	
Order & Deliver Steel	55 days/order
Erect Steel	1 day/span
Ties and Track	3 days/span
Pumphouse	
Structure	30 days/m
Order & Deliver Electrical & Mechanical Equipment	90 days
Install Electrical & Mechanical Equipment	30 days
Miscellaneous	
Removing Old Pavement	60 m/day
Removing Old Pavement for Recycling(7.3m)	450 m/day
Crushing Old Concrete for 6A or OGDC	1350 mtons/day
Removing Trees(Urban)	15 units/day
Removing Trees(Rural)	30 units/day
Removing Concrete Pavement	450 m2/day
Removing Sidewalk	250 m2/day
Removing Curb & Gutter	450 m/day
Removing Bitumin.ous Surface	1600 m2/day

Conditioning Aggregate	900 m/day
Bitumin.ous Base Stablizing	2500 m2/day
Ditching	600 m/day
Trenching for Shoulders	750 m/day
Station Grading	610 m/day
Clearing	8000 m2/day
Restoration(Topsoil, Seeding, Fertilizer & Mulch)	1650 m2/day
Sodding	2100 m2/day
Seeding	40000 m2/day
Guard Rail	230 m/day
Fence(Woven Wire)	360 m/day
Fence(Chain Link)	150 m/day
Clean Up	600 m/day
Concrete Median Barrier	300 m/day
Cure	min. 7 days
Reroute Traffic(Add 4 days if 1st item)	1 day/move
Concrete Glare Screen	450 m/day
Light Foundations	6 units/day
Order & Delivery	6-8 week/order
Remove Railing & Replace with Barrier(1 or 2 decks at a time)	4 days/side
Longitudinal Joint Repair	1600 m/day
Crack Sealing	4800 m/day
Joint and Crack Sealing	500 m/day
Repairing Pavement Joints - Detail 7 or 8	200 m/day
Seal Coat	6400 lane m/day
Diamond Grinding/Profile Texturing Concrete	3300 m2/day
Rest Area Building	
Order Material	3 months
Construct Building	9 months
Tower Lights	
Order and Deliver Towers	100 days
Weigh-In-Motion	
Order and Deliver Materials	1 month-6weeks
O & D with Installation	3 months
Raised Pavment Markers	300 each/day
Attenuators	2 each/day
Shoulder Corrugations, Ground or Cut	8 km-9.7 km/side/day
Aggregate Base	2900 m^2/day
Aggregate Shoulders	350 m^3/day
Freeway Signing - 3# Post Type	50 signs/day

Concrete Joint Repair(High Production-Projects with > 1000 patches)

Average(1.8m)	50 patches/day
Large(>1.8m)	500 m2/day
Bridge Painting	90 m2/day
Pin and Hanger Replacement	3 beams/day
Order Pin & Hanger	60 days

Bridge Repair

Scarifying(Including Clean up)	10000 m2/day
Joint Removal(Including Clean up)	4 m/day
Formin.g & Placement	3.5 m/day
Hydro-Demolishing	300 m/day
Barrier Removal	15 m/day
Placement	45 m/day
Hand Chipping (Other than Deck)	.24 m^3/person/day
Shoulder Corrugations, Ground or Cut	8 km-9.7 km/side/day
Casting Latex Overlay	250 m/day
Curing Overlay	
Regular	4 days
High Early	1 day
Thrie Beam Retrofit	30 m/day
Beam End Repairs	
Welded Repairs	.75 days/repair
Bolted Repairs	.50 days/repair
Bolted Stiffeners (Pair)	.25 days/repair
Grind Beam Ends	.25 days/repair
Welded Stiffeners (Pair)	.25 days/repairH-
Pedestal Repairs:	
Welded Repair	.50 days/each
Replacement	1 day/each
Deck Removal	235 m^2/day

Surfacing-Bituminous

Metro-Primary(<18000mtons)	
Paving	540 mtons/day
Joints	150 m/day
Cold Milling	3400 m2/day
Aggregate Shoulders	900 mtons/day
Metro Primary(>18000mtons)	
Paving	540 mtons/day
Joints	200 m/day

Cold Milling	7500 m2/day
Metro Interstate(>18000mtons)	
Paving	1100 mtons/day
Joints	360 m/day
Aggregate Shoulders	900 mtons/day
Urban Primary(<18000mtons)	
Paving	640 mtons/day
Joints	100 m/day
Cold Milling	1700 m2/day
Rubblizing	1700 m2/day
Aggregate Shoulders	450 mtons/day
Urban Primary(>18000mtons)	
Paving	1000 mtons/day
Joints	120 m/day
Cold Milling	1700 m2/day
Aggregate Shoulders	500 mtons/day
Urban Interstate(>18000mtons)	
Paving	1200 mtons/day
Joints	220 m/day
Cold Milling	1700 m2/day
Rubblizing	5800 m2/day
Aggregate Shoulders	640 mtons/day
Rural Primary(<18000mtons)	
Paving	640 mtons/day
Joints	120 m/day
Cold Milling	590 mtons/day
Crush & Shape	10000 m2/day
Aggregate Shoulders	640 mtons/day
Rural Primary(>18000mtons)	
Paving	1100 mtons/day
Joints	150 m/day
Cold Milling	800 mtons/day
Crush & Shape	10000 m2/day
Rural Interstate(>18000mtons)	
Paving	1280 mtons/day
Joints	220 m/day

B. WORKSHEET

WORK DAY/COMPLETION DATE DETERMINATION

CS: _____ JN:

DESCRIPTION OF WORK: _____

MAJOR WORK ITEM	PRODUCTION QUANTITY	PRODUCTION RATE	ESTIMATED TIME

TOTAL ESTIMATED TIME:

COMPLETION DATE: _____ (Calendar Days or Work Days)

COMMENTS:

_____
_____
_____
_____
_____

C. MDOT CALENDARS

The following are the MDOT 4, 5 and 6 day calendars:

CALENDAR	DESCRIPTION	START	FINISH
1	Std - Apr 16 - Nov 15 - 4 day	APR 16	N0V 15
2	LP - Bit Stab – 4 day	MAY 15	OCT 15
3	UP - Bit Stab – 4 day	JUN 01	OCT 01
4	LP S of M-46 - Bit Pave - 4 day	MAY 05	NOV 15
5	LP N of M-46 - Bit Pave - 4 day	MAY 15	NOV 01
6	UP - Bit Pave - 4 day	JUN 01	OCT 15
7	LP - Bit Seal Coat - 4 day	JUN 01	SEP 15
8	UP - Bit Seal Coat - 4 day	JUN 15	SEP 01
9	Tree Planting - Deciduous - 4 day	MAR 01 OCT 01	MAY 15 NOV 15
10	Tree Planting - Evergreen - 4 day	MAR 01	JUN 01
11	South LP - Restoration - 4 day	MAY 01	OCT 10
12	North LP - Restoration - 4 day	MAY 01	OCT 01
13	UP – Restoration - 4 day	MAY 01	SEP 20
14	Full Year - Winter Work - 4 day	JAN 01	DEC 31
21	Std - Apr 16 - Nov 15 - 5 day	APR 16	NOV 15
22	LP - Bit Stab – 5 day	MAY 15	OCT 15
23	UP - Bit Stab – 5 day	JUN 01	OCT 01
24	LP S of M-46 - Bit Pave - 5 day	MAY 05	NOV 15
25	LP N of M-46 - Bit Pave - 5 day	MAY 15	NOV 01
26	UP - Bit Pave - 5 day	JUN 01	OCT 15
27	LP - Bit Seal Coat - 5 day	JUN 01	SEP 15
28	UP - Bit Seal Coat - 5 day	JUN 15	SEP 01
29	Tree Planting - Deciduous - 5 day	MAR 01	MAY 01

		OCT 01	NOV 15
30	Tree Planting - Evergreen - 5 day	MAR 01	JUN 01
31	South LP - Restoration - 5 day	MAY 01	OCT 10
32	North LP - Restoration - 5 day	MAY 01	OCT 01
33	UP – Restoration - 5 day	MAY 01	SEP 20
34	Full Year - Winter Work - 5 day	JAN 01	DEC 31
35	Full Year - Expedited - 6 day	JAN 01	DEC 31

ATTACHMENT B

CS 62015 – JN 60571C

M-20 (Baseline Road) from a point 126 feet east of Catalpa Ave. easterly 7.415 miles to a point 355 feet west of Cottonwood Ave., in Wilcox, Everett, Big Prairie and Goodwell Townships, Newaygo County.

MONTHLY PROGRESS REPORTS

The first two pages of this attachment are the necessary layout of the Monthly progress reports and the last three pages are a completed example.

Control Section 00000
Job Number 00000C
Structure Number S00
Date 00/00/00

MONTHLY PROGRESS REPORT

A. Work accomplished during the previous month.

B. Anticipated work items for the upcoming month.

C. Real or anticipated problems on the project.

D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.

E. Items needed from MDOT.

F. Copy of Verbal Contact Records for the period (attached).

Structure Number - Control Section - Job Number
Route, Location Description
Design Schedule as of 00/00/95

LIST TASKS, SUBMITTALS, APPROVALS AND MEETINGS AS OUTLINED IN SCOPE OF DESIGN SERVICES AS NEEDED. THIS LIST IS JUST AN EXAMPLE.

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or **Actual** Start Dates	(Anticipated) or **Actual** Finish Dates	Task	Task Description
00/00/00	**00/00/00**	00/00/00	**00/00/00**	??	Initial project meeting.
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3330	Conduct Design Survey..
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3360	Prepare Base Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**		Submit Base Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3580	Develop Preliminary Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3390	Develop Construction Zone Traffic Control Concepts
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3540	Develop Construction Zone Traffic Control Plan
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3550	Develop Preliminary Traffic Operations Plan.
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3351	Review & Submit of Preliminary Right-Of-Way Plans.
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Submittal of The Plan Review Package.
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Completion of the Plan Review Meeting.
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3840	Develop Final Plans and Specifications
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Submittal of final plans/proposal package to MDOT for final review.
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3870	Omissions/Errors Check (OEC) Meeting
00/00/00	**00/00/00**	00/00/00	**00/00/00**		Consultant=s Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT (two weeks after OEC Meeting)
00/00/00	**00/00/00**	00/00/00	**00/00/00**		Final Deliverables to MDOT

Control Section 12345
Job Number 11111C
Structure Number S02
Date 07/31/95

MONTHLY PROGRESS REPORT

A. Work accomplished during the previous month.

1. During the last month we completed the Final Right of Way plans and submitted them to Thomas Nelson, Jr. on 05/01/99.

B. Anticipated work items for the upcoming month.

1. Submit the Preliminary Plans and related material on 03/11/99.

2. Attend the meeting regarding the Ameritech lines on the bridge, scheduled for 03/12/99.

C. Real or anticipated problems on the project.

1. We foresee no problems at this time.

D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.

1. The design is falling behind schedule because we had problems resolving the geometries of the ramps in relation to the bridge. The Preliminary Plan submittal will be the only task affected by this delay because we will make up the lost time prior to submitting the Final Plans and Specifications.

E. Items needed from MDOT.

1. Prior to final Plan submittal we will need the latest Special provision and Supplemental Specification checklist.

F. Copy of Verbal Contact Records for the period (attached).

1. Discussed bridge and ramp geometries with Tom Myers of M$DOT Traffic and Safety Division on 07-24-95.

SN: S02 - CS: 12345 - JN: 11111C
M-111, from There Village Limits to north of That Road
Design Schedule as of 07/31/95

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or **Actual** Start Dates	(Anticipated) or **Actual** Finish Dates	Task	Task Description
01/12/95	01/12/95	**01/12/95**	**01/12/95**??	Initial project meeting.	
01/29/95	01/29/95	**01/30/95**	**01/30/95**3330	Conduct Design Survey.	
02/17/95	04/10/95	**02/17/95**	**04/20/95**3360	Prepare Base Plans.	
02/29/95	02/29/95	**02/29/95**	**02/29/95**3390	Develop the Construction Zone Traffic Control Concepts	
03/12/95	03/13/95	**03/12/95**	(03/30/95)	3540	Develop Construction Zone Traffic Control Plan
03/20/95	03/19/95	**03/25/95**	(03/30/95)	3551	Develop/Review Preliminary Traffic Signal Plan
07/01/95	07/01/95	(07/01/95)	(07/01/95)	3590	The Plan Review Meeting
07/11/95	08/11/95	(07/11/95)	(08/11/95)	3821	Complete/Review Traffic Signal Plan
09/15/95	09/15/95	(09/15/95)	(09/15/95)	3830	Complete Construction Zone Traffic Control Plan.
09/16/95	09/16/95	(09/16/95)	(09/16/95)	3840	Develop Final Plans and Specifications
09/25/95	09/23/95	(09/25/95)	(09/25/95)	3870	Omissions/Errors Check (OEC) Meeting

VERBAL CONTACT RECORD

Control Section 12345
Job Number 11111C
Structure Number S02
Date 07/31/95

Joe Engineer talked to Tom Myers and decided to use a 0.05'/ft super on ramp A leading into the bridge.

ATTACHMENT C

CS 62015 – JN 60571C

M-20 (Baseline Road) from a point 126 feet east of Catalpa Ave. easterly 7.415 miles to a point 355 feet west of Cottonwood Ave., in Wilcox, Everett, Big Prairie and Goodwell Townships, Newaygo County.

P/PMS TASK - INDEX - VERSION 2 rev 2

ISSUED 9/29/2000

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
3120 - CONDUCT STRUCTURE DECK CONDITION SURVEY	07/29/99	
3330 - CONDUCT DESIGN SURVEY	07/29/99	
3340 - CONDUCT STRUCTURE SURVEY	07/29/99	
3350 - CONDUCT HYDRAULICS SURVEY	07/29/99	
3360 – PREPARE BASE PLANS	06/22/99	
3361 - REVIEW AND SUBMIT PRELIMINARY RIGHT OF WAY (PROW) PLANS	07/16/99	
3370 – PREPARE STRUCTURE STUDY	06/16/99	
3380 - REVIEW BASE PLANS	06/29/99	
3390 - DEVELOP THE CONSTRUCTION ZONE TRAFFIC CONTROL CONCEPTS	07/16/99	
3510 - PERFORM ROADWAY GEOTECHNICAL INVESTIGATION	07/29/99	
3520 - CONDUCT HYDROLOGIC, HYDRAULIC AND SCOUR ANALYSES	08/29/00	revised per P. Schriner
3530 - CONDUCT FOUNDATION STRUCTURE INVESTIGATION	07/16/99	
3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	07/16/99	
3551 - DEVELOP/REVIEW PRELIMINARY TRAFFIC SIGNALS PLAN	07/16/99	added to index 1/5/2000
3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN	07/16/99	
3553 - DEVELOP PRELIMINARY NON - FREEWAY SIGNING		

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
PLAN	**07/16/99**	
3554 - DEVELOP PRELIMINARY FREEWAY SIGNING PLAN	**07/16/99**	
3570 – PREPARE PRELIMINARY STRUCTURE PLANS	**07/16/99**	
3580 - DEVELOP PRELIMINARY PLANS	**06/30/99**	
3581 - FINAL RIGHT-OF-WAY PLANS	**07/16/99**	
3590 - REVIEW PRELIMINARY PLANS	**06/29/99**	
3670 - DEVELOP MUNICIPAL UTILITY PLANS	**06/30/99**	
3675 - DEVELOP ELECTRICAL PLANS	**07/01/99**	
3710 - DEVELOP REQUIRED MITIGATION (FOR INFORMATION ONLY, THIS IS NOT A CONSULTANT TASK)	**07/16/99**	
3720 - SUBMIT ENVIRONMENTAL PERMIT APPLICATIONS (FOR INFORMATION ONLY, THIS IS NOT A CONSULTANT TASK)	**07/16/99**	
3821 - COMPLETE/REVIEW TRAFFIC SIGNAL PLANS	**07/16/99**	
3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN	**07/16/99**	
3823 - COMPLETE NON-FREEWAY SIGNING PLAN	**07/16/99**	
3824 - COMPLETE FREEWAY SIGNING PLAN	**07/16/99**	
3830 - COMPLETE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	**06/22/99**	
3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS	**07/02/99**	
3850 - DEVELOP STRUCTURE FINAL PLANS AND SPECIFICATIONS	**07/29/99**	
3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING	**07/13/99**	
4120 - OBTAIN PRELIMINARY TITLE COMMITMENTS	**06/29/99**	
4130 – PREPARE MARKED FINAL R.O.W. PLANS	**06/29/99**	
4140 – PREPARE PROPERTY LEGAL INSTRUMENTS	**06/29/99**	
5010 - CONSTRUCTION PHASE ENGINEERING ASSISTANCE	**07/29/99**	